REMARKS

Status of the Claims

Claims 3, 5-8, 12 and 14-25 are now present in this application. Claims 14-24 have been withdrawn from consideration as being directed to a non-elected invention. Claims 3, 5-8, 12 and 25 have been rejected. Reconsideration of this application is respectfully requested.

Menzies et al.

In the final Office Action, the Examiner states that the cited Menzies et al. reference comprises UV light as a sterilization means and irradiation by ultraviolet light, which is ionizing. However, UV light exercises a sterilizing effect with its own high energy, and sterilizing by UV light is generally not synonymous with sterilizing by ions. In addition, the citation does not disclose that UV light generates ions and that the generated ions react so as to sterilize microorganisms. Furthermore, the Examiner states that the claimed method does not define any specific arrangement, parameters and/or dimensions of "a wind tunnel inside a container," based on which the Examiner alleges that the cited method for evaluation of microorganism elimination in the ventilation system inside a building is considered to anticipate the invention as claimed. In reply thereto, however, we would like to point out that the wording "a wind tunnel inside a container" in the current application is clearly different from the method of the Menzies citation because of the reasons described hereunder.

First, according to Menzies et al., the objectives of the citation are to test whether installation and operation of germicidal ultraviolet (GUV) lights in central ventilation systems would be feasible, without adverse effects, undetected by building occupants, and effective in eliminating microbial contamination. According to the citation, the irradiating of germicidal ultraviolet (GUV) light is performed in an indoor atmosphere in a building. Then questionnaires obtained from the workers in the building are examined so as to determine the effect on the health of the office workers. Air contamination sampled from air is examined so as to ascertain whether the workers' health is badly affected or not. Thus, it is obvious that microorganisms

such as bacteria or the like are not discharged positively into the indoor atmosphere of a building. That is, the citation does not disclose a step of positively supplying the air containing microorganisms in the space inside of the wind tunnel from its one end.

Next, the Examiner equates the container in the present invention with an office building or the indoors thereof. However, needless to say, "a building" is a structure such as a house or school that has a roof and walls (Oxford Advanced Learner's Dictionary 7th Edition). A building should be considered to be one divided into several indoor atmospheres by walls, ceilings, floors or the like (Oxford Advanced Learner's Dictionary 7th Edition). In actuality, the building in Menzies et al is divided into several indoor atmospheres.

On the other hand, a so-called "container" is a box, bottle, etc. in which something can be stored or transported (Oxford Advanced Learner's Dictionary 7th Edition). Accordingly, it seems to be natural to hold the view that the building in the Menzies citation is quite different from the general concept regarding "a container". If the Menzies citation is compared with the container in the present invention, the indoors of the citation would be seemingly similar to the container in the present invention. Even in this case, however, a container having the concept of "a box, bottle, etc." referred to in Oxford Advanced Learner's Dictionary 7th Edition does not seem to equate with the indoors of a building as mentioned in the citation. Needless to say, the concept for "indoors" has the meaning of "to be located, done or used inside a building".

Furthermore, even if the indoors of a building as mentioned in the citation can be deemed to be equated with the container in the present invention, the citation has nothing similar to "a wind tunnel" as disclosed in the present application. For example, the wording "a wind tunnel" has the meaning of "a large tunnel where aircraft, etc. are tested by forcing past them" (Oxford Advanced Learner's Dictionary 7th Edition), which implies something like a cylinder through which air is flown by force. In view of this, it is questionable whether the Examiner holds the view that "a wind tunnel" in the present invention corresponds to "the ventilation systems" in the citation. In addition, it is questioned whether the Examiner also believes whether "a wind tunnel" in the present invention corresponds to "the central air supply of ducting" in the citation.

Presuming that "a wind tunnel" in the present invention corresponds to the ducting in a building, however, in general, the ducting and ventilating systems inside a building are located so as not to be exposed indoors. Blowout ports are slightly opened indoors in a building. Hence,

it is inappropriate to say that such ducting and ventilating systems are installed indoors in a building. That is, the Menzies citation only shows an example of ducting and ventilation systems arranged outside the indoor space although the ducting and ventilation systems are within a building. To be more specific, the Menzies citation has no concept of the installation of a wind tunnel inside a container.

In addition, the citation describes on page 2, Method/Intervention 4th paragraph, that "all UV bulbs produced light at 254 nm wavelengths and were installed in the central air supply ducting just downstream from and shining directly on the cooling coils, walls, and floor of the air supply ducting, and drip pans below the cooling coils." That is, the GUV light in the citation shines on a floor of an air supply ducting and cooling coils and the like in advance for the purpose of testing the health condition of office workers who work within the building. After that, air contamination sampled from indoor air is examined. In view of this, the citation just shows the configuration depicted in FIG. 1 in the present application, and does not teach the way and configuration shown in FIG. 8 in the present application. In other words, according to the citation, there is no performance about "sampling the microorganisms from the air containing microorganisms after the irradiation or the particles from the other side of the wind tunnel" featured in the present invention. In conclusion, the features in the present application are not anticipated by the citation of Menzies et al.

WO01/87364

The Examiner states in the final Office Action that WO01/87364 teaches a method for evaluating the elimination of microbial cells with an ion generating device in air conditioning systems that inherently encompass and comprise a flow of air and, thus , "a wind tunnel inside a container" within the meaning of the instant claims. However, the '364 citation just shows the configuration depicted in FIG. 1 in the present application.

Even if the indoors of a building as mentioned in the citation can be deemed to be equated with the container in the present invention, the citation fails to teach "a wind tunnel" in the present invention. In our view, the Examiner does not seem to understand the meaning of "a wind tunnel inside a container" correctly. We would like to point out that "a container" and "a wind tunnel" should be considered separately for a better understanding of the present invention.

Furthermore, the citation does not teach or suggest about the following steps in the present invention:

"steps of installing a wind tunnel inside a container, forming a passage of air containing microorganisms inside the wind tunnel, supplying the air containing microorganisms in the space inside of the wind tunnel from one side of the wind tunnel, carrying out the sterilizing of the microorganisms to irradiate particles comprising ions to the air containing microorganisms, sampling the microorganisms from the air or particles after irradiation from the other side of the wind tunnel, and measuring the concentration or activity of the sampled microorganisms to evaluate the performance of elimination of the microorganisms of said particles from the result of measurements"

As a result, the cited WO01/87364 paper is not considered to anticipate the claimed invention.

Osawa

The Examiner states in the final Office Action that the method of Osawa for evaluation of microorganism elimination by ionizing irradiation in a room or in a box comprising an air flow is considered to anticipate the invention as claimed. However, the citation just teaches a container and fails to teach "a wind tunnel." We would like to point out that "a container" and "a wind tunnel" should be considered separately for a better understanding of "a wind tunnel inside a container" in the present application.

Furthermore, the citation does not teach or suggest the following steps in the present invention:

> steps of installing a wind tunnel inside a container, forming a passage of air containing microorganisms inside the wind tunnel, supplying the air containing microorganisms in the space inside of the wind tunnel from one side of the wind tunnel, carrying out the sterilizing of the microorganisms to irradiate particles comprising ions to the air containing microorganisms, sampling the microorganisms from the air or particles after irradiation from the other side of the wind tunnel, and measuring the concentration or activity of the sampled microorganisms to evaluate the performance of elimination of the microorganisms of said particles.

As a result, the cited Osawa reference is not considered to anticipate the claimed invention. The Examiner also states that the Osawa reference describes that air purifiers "emit ions" and, thus the cited method comprises the use of the same irradiation as encompassed by the instant claims.

However, the Osawa citation shows a plurality of air purifiers which emit negative ions to attach a negative charge to airborne particles and use Coulomb force to cause the particles to be collected at the anode electrodes provided in the bodies of the air purifiers, from which it is obvious that the citation just performs the evaluation of microbial elimination using air filters.

Rose et al.

The Examiner states that the cited method of Rose et al is for sterilizing microorganisms using UV light and radiation by ionizing of ultraviolet light. On the basis of this statement, the Examiner holds the view that the arguments presented herein are not persuasive. However, UV light exercises a sterilizing effect by its own high energy, and sterilizing by UV light is generally not synonymous with sterilizing by ions. In addition, the citation does not disclose that UV light generates ions and that the generated ions react so as to sterilize microorganisms.

The Examiner further states in the final Office Action that the applicant's argument is not persuasive because the apparatus of Fig. 7 contains air inlet 92, air outlet 94 and fan 96 and, therefore, the cited method encompasses "a wind tunnel inside a container within the meaning of the instant claims." However, in general, a chamber has the meaning of a room used for a particular purpose. From this point of view, the sterilization chamber 84 in Fig. 7 in the citation corresponds to the container in Fig. 1 in the present application. The chamber 84, however, does not have any material corresponding to "a wind tunnel" mentioned in connection with the present invention. In our view, the Examiner does not seem to understand the meaning of "a wind tunnel inside a container" correctly. We would like to point out that "a container" and "a wind tunnel" should be considered separately for a better understanding of the present invention.

Furthermore, even if sterilization chamber 84 can be deemed to be equated with "a wind tunnel" in the present invention, the citation has nothing similar to "a container" disclosed in the present application. In conclusion, the features in the present invention are not anticipated by the citation to Rose et al.

35 USC 103

The Examiner states that the cited references are in the same field of endeavor and they seek to solve the same problems as the instant application and claims, and that one skilled in the art is free to select components available in the prior art.

However, the references cited herein do not teach or suggest the following steps in the present invention:

> steps of installing a wind tunnel inside a container, forming a passage of air containing microorganisms inside the wind tunnel, supplying the air containing microorganisms in the space inside of the wind tunnel from one side of the wind tunnel, carrying out the sterilizing of the microorganisms to irradiate particles comprising ions to the air containing microorganisms, sampling the microorganisms from the air or particles after irradiation from the other side of the wind tunnel, and measuring the concentration or activity of the sampled microorganisms to evaluate the performance of elimination of the microorganisms of said particles from the result of measurements.

The Examiner also states that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. However, there seems to be no precedent which directly affirms a judgment based on hindsight reasoning.

In summary, the claims in the present application are patentably distinct from the claimed invention under 35 USC 102(b) as well as under 35 USC 103(a). In particular, it is to be noted that "A claim is anticipated only if each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).* In addition, it is submitted that there is no teaching, suggestion or motivation that would lead one skilled in the art to the claimed invention. Therefore, favorable action is requested.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and

complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

In view of the above Response, Applicant believes that the pending application is in condition for allowance. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Raymond C. Stewart, Registration No. 21,066, at the telephone number of the undersigned below to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Director is hereby authorized in this, concurrent, and future replies to charge any fees required during the pendency of the above-identified application or credit any overpayment to Deposit Account No. 02-2448.

Dated March 26, 2010

Respectfully submitted,

By Raymond C. Stewart

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